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PETITION FEE
Under 37 CFR 1.17(f), (g) & (h)**TRANSMITTAL**

(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	10/649,635
Filing Date	August 28, 2003
First Named Inventor	Hiroshi NOJIMA
Art Unit	2161
Examiner Name	S. Metjahic
Attorney Docket Number	520.43063X00

Enclosed is a petition filed under 37 CFR 1.102(d) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). Payment of \$ 130.00 is enclosed.

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

Payment of Fees (small entity amounts are NOT available for the petition (fees))☒ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. 50-1417:☐ petition fee under 37 CFR 1.17(f), (g) or (h)☒ any deficiency of fees and credit of any overpayments

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☐ Check in the amount of \$ _____ is enclosed.☒ Payment by credit card (From PTO-2038 or equivalent enclosed). Do not provide credit card information on this form.**Petition Fees under 37 CFR 1.17(f):****Fee \$400****Fee Code 1462**

For petitions filed under:

§ 1.53(e) - to accord a filing date.

§ 1.57(a) - to accord a filing date.

§ 1.182 - for decision on a question not specifically provided for.

§ 1.183 - to suspend the rules.

§ 1.378(e) for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.

§ 1.741(b) - to accord a filing date to an application under § 1.740 for extension of a patent term.

Petition Fees under 37 CFR 1.17(g):**Fee \$200****Fee code 1463**

For petitions filed under:

§ 1.12 - for access to an assignment record.

§ 1.14 - for access to an application.

§ 1.47 - for filing by other than all the inventors or a person not the inventor.

§ 1.59 - for expungement of information.

§ 1.103(a) - to suspend action in an application.

§ 1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.

§ 1.295 - for review of refusal to publish a statutory invention registration.

§ 1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.

§ 1.377 - for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.

§ 1.550(c) - for patent owner requests for extension of time in ex parte reexamination proceedings.§ 1.956 - for patent owner requests for extension of time in inter partes reexamination proceedings.

§ 5.12 - for expedited handling of a foreign filing license.

§ 5.15 - for changing the scope of a license.

§ 5.25 - for retroactive license.

Petition Fees under 37 CFR 1.17(h):**Fee \$130****Fee Code 1464**

For petitions filed under:

§ 1.19(g) - to request documents in a form other than that provided in this part.

§ 1.84 - for accepting color drawings or photographs.

§ 1.91 - for entry of a model or exhibit.

§ 1.102(d) - to make an application special.

§ 1.138(c) - to expressly abandon an application to avoid publication.

§ 1.313 - to withdraw an application from issue.

§ 1.314 - to defer issuance of a patent.

Name (Print/Type)	Frederick D. Bailey	Registration No. (Attorney/Agent)	42,282
Signature		Date	July 29, 2005

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



520.43063X00

Applicants: Hiroshi NOJIMA
Serial No.: 10/649,635
Filed: August 28, 2003
For: STORAGE OPERATION MANAGEMENT SYSTEM

**PETITION TO MAKE SPECIAL
UNDER 37 CFR §1.102(MPEP §708.02)**

MS Petition

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 29, 2005

Sir:

Applicants hereby petition the Commissioner to make the above-identified application special in accordance with 37 CFR §1.102(d). Pursuant to MPEP §708.02(VIII), Applicants state the following.

(A) This Petition is accompanied by the fee set forth in 37 CFR §1.17(h).

The Commissioner is hereby authorized to charge any additional payment due, or to credit any overpayment, to Deposit Account No. 50-1417.

(B) All claims are directed to a single invention.

If the Office determines that all claims are not directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status in conformity with established telephone restriction practice.

(C) A pre-examination search has been conducted.

The search was directed towards a storage system. In particular, the search was directed to the invention set forth in claims 1-20. The invention is directed to a storage operation management system which is composed of multiple storage devices connected to a network and an operation management server for managing operations of the storage devices and provides information from the storage devices to a business server having multiple applications accessed via the network, comprising: the operation management server including, policy acquisition means which acquire a policy regarding the volume; detection means which detect that a change occurred in a configuration of the storage devices connected to the network; volume information management means which, when a change was detected by the detection means, acquire a specification value of a volume from the changed storage device and updating volume management information; memory means which hold an attribute value of the storage device corresponding to a type of an application used in the business server for a total volume including the volume updated by the volume information management means; processing means which calculate a standard value for classification of the attribute value with reference to a type of the application obtained by referring to the memory means; and allocation processing means in which an attribute value that conforms to a type of an application with reference to the policy requested from the policy acquisition

means allocates an unallocated volume within a range of a standard value calculated by the processing means.

The search of the above features was conducted in the following areas:

<u>Class</u>	<u>Subclass</u>
707	10, 100, 104.1, 200, 205
709	201, 203, 223
711	114, 170
713	213

Additionally, a computer database search was conducted on the USPTO system EAST.

(D) The following is a list of the references deemed most closely related to the subject matter encompassed by the claims:

<u>U.S. Patent Publication No.</u>	<u>Inventor(s)</u>
2003/0126190	Wada et al.
2004/0193879	Sonoda et al.
2004/0215879	Matsunami et al.
2004/0243600	Ikeda et al.

A copy of each of these references (as well as other references uncovered during the search) is enclosed in an accompanying IDS.

(E) It is submitted that the present invention is patentable over the references for the following reasons.

It is submitted that the cited references, whether taken individually or in combination with each other, fail to teach or suggest the invention as claimed. In particular, the cited references, at a minimum, fail to teach or suggest as recited in the claims:

a first feature of the present invention as recited in independent claim 1 wherein an operation management server includes: detection means which detect that a change occurred in a configuration of the storage devices connected to the network; volume information management means which, when a change was detected by the detection means, acquire a specification value of a volume from the changed storage device and updating volume management information; processing means which calculate a standard value for classification of the attribute value with reference to a type of the application obtained by referring to the memory means; and allocation processing means in which an attribute value that conforms to a type of an application with reference to the policy requested from the policy acquisition means allocates an unallocated volume within a range of a standard value calculated by the processing means;

a second feature of the present invention as recited in independent claim 14 including a program performing detecting, by a detection means, whether a

change occurred in a configuration of the storage devices connected to the network; acquiring, by a volume information management means, when a change was detected by the detection means, a specification value of a volume from the changed storage device and updating volume management information; calculating, by a processing means, a standard value for classification of the attribute value with reference to a type of the application obtained by referring to the memory; and allocating, in an allocation processing means, by an attribute value that conforms to a type of an application with reference to the policy requested from the policy acquisition means an unallocated volume within a range of a standard value calculated by the processing means;

a third feature of the present invention as recited in independent claim 15 including a first calculation step that calculates a standard value of level classification in accordance with a type of an application when the volume is selected in the obtained first distribution; detecting a change in a configuration of the storage device included in a system; obtaining a second distribution of the multiple volumes with reference to the attribute value for the system including the storage device after the change; and a second calculation step that calculates the standard value of the level classification in accordance with the type of the application when the volume is selected in the obtained second distribution; and

a fourth feature of the present invention as recited in independent claim 18 including first calculation means which calculates a standard value of level classification in accordance with a type of an application when a volume is selected for at least one attribute value of each storage device; and second

calculation means which calculates the standard value of the level classification in accordance with a change in distribution states of multiple storage devices for the attribute value when a configuration of the storage device was changed.

To the extent applicable to the present Petition, Applicants submit that although the distinguishing feature(s) may represent a substantial portion of the claimed invention, the claimed invention including said feature(s) and their inter-operation provides a novel storage system and system and method related to or implemented in or by said storage system not taught or suggested by any of the references of record.

Further, the cited references fail to teach or suggest the above noted features of the present invention when taken in combination with other limitations recited in the claims.

The references considered most closely related to the claimed invention are briefly discussed below:

U.S. Patent Publication No. 2003/0126190 (Wada et al.) discloses service providing device 10 having a policy management section 13. The policy management section 13 manages a policy database DB 11. The equipment 10 is provided with an attribute information DB 12 storing an attribute information file. The attribute information DB 12 is managed by an attribute information management section 14. The attribute information management section 14 checks whether or not a user having attribute information satisfying a condition of receiving a service in the policy description file. The attribute management section 14 requests a function execution section 16 to execute the service if the

user has satisfied the attribute information condition of receiving the service. A portable storage medium can store an attribute information file 310 (in the policy description file) (See e.g., Abstract; paragraphs 53-56, 58-60, 69; and Figure 1.). However, unlike the present invention, Wada et al. does not disclose volume information management means which, when a change was detected by the detection means, acquire a specification value of a volume from the changed storage device and updating volume management information. Furthermore, Wada et al. does not disclose a processing means which calculate a standard value for classification of the attribute value with reference to a type of the application obtained by referring to the memory means; and allocation processing means in which an attribute value that conforms to a type of an application with reference to the policy requested from the policy acquisition means allocates an unallocated volume within a range of a standard value calculated by the processing means. More particularly, Wada et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 14, the above described third feature of the present invention as recited in independent claim 15, and the above described fourth feature of the present invention as recited in independent claim 18, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent Publication No. 2004/0193879 (Sonoda et al.) discloses an accounting policy 950 holding information on accounting policies of each file

server. A storage part (of storage device 600A) stores file attributes database 110. File attributes table registration request 6031 includes file attributes table name 6032 and values to register in record 6033. A newly allocated disk size is used when updating server by a server accounting information table 220. The newly allocated disk size is calculated before and after a local file WRITE processes are compared. (See e.g., Abstract; paragraphs 42-46, 163, 170-171, 181; and Figures 1-3, 7-12, 14C.) Unlike the present invention, Sonoda et al. does not disclose a detection means which detect that a change occurred in a configuration of the storage devices connected to the network; and volume information management means which, when a change was detected by the detection means, acquire a specification value of a volume from the changed storage device and updating volume management information. More particularly, Sonoda et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 14, the above described third feature of the present invention as recited in independent claim 15, and the above described fourth feature of the present invention as recited in independent claim 18, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent Publication No. 2004/0215879 (Matsunami et al.) discloses a pool manager 311 with a policy management table 3115 for setting policies. The attributes of the policy “for critical job” include a usable capacity of 10 GB.

The attributes of the policy "for normal job" include a usable capacity of 280 GB. The attributes of the policy "for economy job" include a usable capacity of 160 GB. A new volume is set based on setting policies. A pool management agent 1 (221) transmits a setting policy and volume capacity to the pool manager 311 of the management console 1 (301). (See, e.g., Abstract; paragraphs 62-68, 92-94; and Figures 8 and 12.) However, unlike the present invention, Matsunami et al. does not disclose detection means which detect that a change occurred in a configuration of the storage devices connected to the network; and volume information management means which, when a change was detected by the detection means, acquire a specification value of a volume from the changed storage device and updating volume management information. Furthermore, Matsunami et al. does not disclose allocation processing means in which an attribute value that conforms to a type of an application with reference to the policy requested from the policy acquisition means allocates an unallocated volume within a range of a standard value calculated by the processing means. More particularly, Matsunami et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 14, the above described third feature of the present invention as recited in independent claim 15, and the above described fourth feature of the present invention as recited in independent claim 18, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent Publication No. 2004/0243600 (Ikeda et al.) discloses a management server 200 for managing operations of the storage devices and provides information from the storage devices 600 to business server 100. The management server 200 has a policy management program 300. A "Resource Type" field shows the definitions of management target types. A volume 610 is set within a storage system 1 (600) or storage system 2 (600). A resource definition 820 is a table for defining actual management targets corresponding to a management target type defined by a resource type definition 810. (See, e.g., Abstract; paragraphs 55-56, 83, 85, 108-109; and Figures 1-7, and 19-20.) However, unlike the present invention, Ikeda et al. does not disclose a detection means which detect that a change occurred in a configuration of the storage devices connected to the network; and a volume information management means which, when a change was detected by the detection means, acquire a specification value of a volume from the changed storage device and updating volume management information. Furthermore, Ikeda et al. does not disclose a memory means which hold an attribute value of the storage device corresponding to a type of an application used in the business server for a total volume including the volume updated by the volume information management means; and a processing means which calculate a standard value for classification of the attribute value with reference to a type of the application obtained by referring to the memory means. More particularly, Ikeda et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second

feature of the present invention as recited in independent claim 14, the above described third feature of the present invention as recited in independent claim 15, and the above described fourth feature of the present invention as recited in independent claim 18, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

Therefore, since the cited references at a minimum fail to teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 14, the above described third feature of the present invention as recited in independent claim 15, and the above described fourth feature of the present invention as recited in independent claim 18, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims, it is submitted that all of the claims are patentable over the cited references whether said references are taken individually or in combination with each other.

F. Conclusion

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist. The United States Patent and Trademark Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the United States Patent and Trademark Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the

references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter is patentable over the references, the United States Patent and Trademark Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

G. Fee (37 C.F.R. 1.17(h))

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

☒ the Credit Card Payment Form (attached) for \$130.00.

☐ charging Account _____ the sum of \$130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (Atty. Docket No. 520.43063X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



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